

Ca

8

Viscosity of melts of igneous rocks and minerals. A. A. Leon'eva. *Ibid. Nauk S.S.S.R., Otdel. Tekh. Nauk, Inst. Mashinostroyeniya, Sovetskoye po. Vostochny Zhuk. Inst. i Kollod. Raznoye* (Conf. on Viscosity of Liquids and Colloidal Solns.) 1, 307-32 (1911). Review and discussion of previous work. Viscosity (η) measurements at 1400° of numerous rocks and minerals fit the curve $\log \eta = 21.3 - (a + 1.11) \log 10.5 + 0.05$, where a = coefficient of acidity = ratio of the no. of O atoms of SiO_2 and the no. of O atoms of basic and semibasic oxides. N. Thomsen.

ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1900-1910 1911-1920 1921-1930 1931-1940 1941-1950 1951-1960 1961-1970 1971-1980 1981-1990 2000-2010 2011-2020 2021-2030 2031-2040 2041-2050 2051-2060 2061-2070 2071-2080 2081-2090 2091-2100 2101-2110 2111-2120 2121-2130 2131-2140 2141-2150 2151-2160 2161-2170 2171-2180 2181-2190 2191-2200 2201-2210 2211-2220 2221-2230 2231-2240 2241-2250 2251-2260 2261-2270 2271-2280 2281-2290 2291-2300 2301-2310 2311-2320 2321-2330 2331-2340 2341-2350 2351-2360 2361-2370 2371-2380 2381-2390 2391-2400 2401-2410 2411-2420 2421-2430 2431-2440 2441-2450 2451-2460 2461-2470 2471-2480 2481-2490 2491-2500 2501-2510 2511-2520 2521-2530 2531-2540 2541-2550 2551-2560 2561-2570 2571-2580 2581-2590 2591-2600 2601-2610 2611-2620 2621-2630 2631-2640 2641-2650 2651-2660 2661-2670 2671-2680 2681-2690 2691-2700 2701-2710 2711-2720 2721-2730 2731-2740 2741-2750 2751-2760 2761-2770 2771-2780 2781-2790 2791-2800 2801-2810 2811-2820 2821-2830 2831-2840 2841-2850 2851-2860 2861-2870 2871-2880 2881-2890 2891-2900 2901-2910 2911-2920 2921-2930 2931-2940 2941-2950 2951-2960 2961-2970 2971-2980 2981-2990 2991-3000 3001-3010 3011-3020 3021-3030 3031-3040 3041-3050 3051-3060 3061-3070 3071-3080 3081-3090 3091-3100 3101-3110 3111-3120 3121-3130 3131-3140 3141-3150 3151-3160 3161-3170 3171-3180 3181-3190 3191-3200 3201-3210 3211-3220 3221-3230 3231-3240 3241-3250 3251-3260 3261-3270 3271-3280 3281-3290 3291-3300 3301-3310 3311-3320 3321-3330 3331-3340 3341-3350 3351-3360 3361-3370 3371-3380 3381-3390 3391-3400 3401-3410 3411-3420 3421-3430 3431-3440 3441-3450 3451-3460 3461-3470 3471-3480 3481-3490 3491-3500 3501-3510 3511-3520 3521-3530 3531-3540 3541-3550 3551-3560 3561-3570 3571-3580 3581-3590 3591-3600 3601-3610 3611-3620 3621-3630 3631-3640 3641-3650 3651-3660 3661-3670 3671-3680 3681-3690 3691-3700 3701-3710 3711-3720 3721-3730 3731-3740 3741-3750 3751-3760 3761-3770 3771-3780 3781-3790 3791-3800 3801-3810 3811-3820 3821-3830 3831-3840 3841-3850 3851-3860 3861-3870 3871-3880 3881-3890 3891-3900 3901-3910 3911-3920 3921-3930 3931-3940 3941-3950 3951-3960 3961-3970 3971-3980 3981-3990 3991-4000 4001-4010 4011-4020 4021-4030 4031-4040 4041-4050 4051-4060 4061-4070 4071-4080 4081-4090 4091-4100 4101-4110 4111-4120 4121-4130 4131-4140 4141-4150 4151-4160 4161-4170 4171-4180 4181-4190 4191-4200 4201-4210 4211-4220 4221-4230 4231-4240 4241-4250 4251-4260 4261-4270 4271-4280 4281-4290 4291-4300 4301-4310 4311-4320 4321-4330 4331-4340 4341-4350 4351-4360 4361-4370 4371-4380 4381-4390 4391-4400 4401-4410 4411-4420 4421-4430 4431-4440 4441-4450 4451-4460 4461-4470 4471-4480 4481-4490 4491-4500 4501-4510 4511-4520 4521-4530 4531-4540 4541-4550 4551-4560 4561-4570 4571-4580 4581-4590 4591-4600 4601-4610 4611-4620 4621-4630 4631-4640 4641-4650 4651-4660 4661-4670 4671-4680 4681-4690 4691-4700 4701-4710 4711-4720 4721-4730 4731-4740 4741-4750 4751-4760 4761-4770 4771-4780 4781-4790 4791-4800 4801-4810 4811-4820 4821-4830 4831-4840 4841-4850 4851-4860 4861-4870 4871-4880 4881-4890 4891-4900 4901-4910 4911-4920 4921-4930 4931-4940 4941-4950 4951-4960 4961-4970 4971-4980 4981-4990 4991-5000 5001-5010 5011-5020 5021-5030 5031-5040 5041-5050 5051-5060 5061-5070 5071-5080 5081-5090 5091-5100 5101-5110 5111-5120 5121-5130 5131-5140 5141-5150 5151-5160 5161-5170 5171-5180 5181-5190 5191-5200 5201-5210 5211-5220 5221-5230 5231-5240 5241-5250 5251-5260 5261-5270 5271-5280 5281-5290 5291-5300 5301-5310 5311-5320 5321-5330 5331-5340 5341-5350 5351-5360 5361-5370 5371-5380 5381-5390 5391-5400 5401-5410 5411-5420 5421-5430 5431-5440 5441-5450 5451-5460 5461-5470 5471-5480 5481-5490 5491-5500 5501-5510 5511-5520 5521-5530 5531-5540 5541-5550 5551-5560 5561-5570 5571-5580 5581-5590 5591-5600 5601-5610 5611-5620 5621-5630 5631-5640 5641-5650 5651-5660 5661-5670 5671-5680 5681-5690 5691-5700 5701-5710 5711-5720 5721-5730 5731-

Ca

Processes and Properties

Viscosity of meteorites and tectites. A. A. Levinskaya
 (Inst. Vysk. N.S.S.R., Odol. Tekh. Nauk, Inst. Mashino-
 stroeniya, Nauchnoye po Vyskazu Zhdanovskiy Kollod.
 Raznoye (Conf. on Viscosity of Liquids and Colloidal
 Solus 1-1, 313 13(1941). Data could be made between
 1000 and 1500° for 2 meteorites, "Okhansk" and "Zho-
 nevskiy" with about 15% SiO₂, 3.3% Al₂O₃, 20% MgO,
 1.5% FeO, log η = 1.3 and 1.8, resp., at 1100°. Single
 points could be measured for a Saratov and a Pervomaisk
 meteorite. Measurements are difficult because of the
 strong attack of the material of the crucibles. A tectite,
 molayite (75% SiO₂, 12.3% Al₂O₃, 4.7% FeO, 2.4% CaO)
 was measured between 1000° (log η = 0) and 1500° (log η
 = 4.0).
 N. Thon

ASB SLA DETAILING LITERATURE CLASSIFICATION

CA 11 Velocity and linear crystallization velocity of glasses. A. A. Leonov. <i>Abstr. Nach. S.S.S.R., Otdel. Tekh. Nauk, Inst. Mekhanicheskoye, Sovetskaya Vyschaya Shkola i Kolloid. Razvitiye (Conf. on Viscosity of Liquids and Colloidal Solns.)</i> 8, 30-7 (1941) (Pub. 1945); <i>cf. C.A.</i> 36, 8078².—The rate of crystn. was studied on 7 compon. of the system Na₂O-SiO₂ in which the SiO₂ content ranged from 60-80% by wt. 4 of these compon. crystd. as Na₂O-SiO₂ which mptd. in the form of spherulites. By plotting t (temp.) vs. v (velocity of crystn.) the 4 glasses showed maxima for v lying near one another. The liquidus temps. of these glasses are also near one another. The highest rate of crystn. (approx. 800 μ per min.) was for a glass contg. the largest quantity of Na₂O (39.10 mol %). By correlating the rate of crystn. and the viscosity at temps below the max. rate of crystn. the two can be seen to be inversely proportional. By plotting fluidity ($\phi = 1/\eta$) vs. v the line obtained is straight. With the Richards equation (<i>C.A.</i> 30, 4063²) the max. rate of crystn. for one of these glasses was calcd. to be 1.45×10^{-4} cm. per sec. Experimentally, it was detd. as 1.87×10^{-4} cm. per sec. Rate of crystn. was also detd. for K₂O-SiO₂ and Li₂O-SiO₂. In both these cases the max. rate of crystn. was shifted to lower viscosities than in the case of the Na glass. The rate of crystn. for the glasses studied can be expressed as $v = K/\eta$ (Leonov, <i>C.A.</i> 35, 2108²). For K, Na, and Li, K is 5.2×10^4, 10^4, and 2.85×10^4, resp. Thus, as the noncrystallizing cation decreases K increases. Yet since v is inversely proportional to η, and since the max. rate of crystn. for K glass is shifted toward lower viscosities, v_m is greater than v_m (1.95-2 times). M. Hoesch		2
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION		FROM SOURCE
100000 02 100000 02 000 000 000 100000 02 000 000 000		100000 02 000 000 000

A.C.S.

Glass

Relation between linear speed of crystallization and viscosity for Na₂O-SiO₂ glasses. A. A. LONCHIKOVA. *Acta Physicochim. U.R.S.S.*, 16, 845-55 (1941); *Chem. Abs.*, 36, 8378 (1942).—The linear crystallization velocity (v) for eight batches with SiO₂ content ranging from 80 to 81% was measured at a series of temperatures. Values of the constants in the relation $v = (h/v) + h_0 \log v$ are tabulated. The second term is of minor importance in every case, and for glasses with 79.8, 74.0, and 63.1% SiO₂, $h_0 = 0$, i.e., $v = h/v$. See "Speed . . ." *Ceram. Abs.*, 20 [8] 114 (1941).

Linear speed of crystallization of potassium, sodium, and lithium disilicates. A. A. LUKT'YVA. *Acta Physicochim. U.R.S.S.*, 16, 97-101 (1942) (in English); *Chem. Abs.*, 37, 2251 (1943).—The linear speed of crystallization as a function of temperature was determined for K and Li disilicates and compared with previously published data for Na disilicate. For K disilicate the speed of crystallization reaches a maximum of 210/min. at 930°. The value for Li disilicate (approximated by extrapolation) is 1100/min. at 700°. These results are represented by $v_{\text{max}} = A/\eta^2$ in which $A = 8.9 \times 10^{-10}$, η is the viscosity in poises, and r is the radius of the cation. See "Relation . . ." *Ceram. Abs.*, 1944, Jan., p. 8.

1ST AND 2ND SUBJECT		PROCESS AND PROPERTIES INDEX		180 AND 4TH CODES	
C		Influence of pressure on the linear velocity of crystallization of sillenite. M. P. VOLAROVICH AND A. A. LEONT'YEV. <i>J. Phys. Chem. (U.S.S.R.)</i>, 17, 45-50 (1943), abstracted in <i>J. Soc. Glass Technol.</i>, 29 [133] 98 (1945). Experimental data on melts containing 73.3% SiO_2 and 26.7% Na_2O and subjected to pressures varying from 1 to 500 atm show that, whereas the rate of crystallization itself is multiplied 8-fold by this increase in pressure, the temperature corresponding to the maximum rate of linear crystallization is changed only from 200° to 740°.			
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION					
FROM SYNOPTIC		COLLECTIONS		FROM SOURCE	
107389 * 1		107389 M17 Q17 Q18		107389 M17 Q17 Q18	
107389 * 1		107389 M17 Q17 Q18		107389 M17 Q17 Q18	

c

Measurement of the specific volume of melts in the system $B_2O_3-SiO_2$. A. A. LEONT'YEV *J. Phys. Chem. (U.S.S.R.)*, 17, 264-68 (1943); *Chem. Abstracts*, 38, 1042 (1944) - Specific volume temperature curves for the system B_2O_3 and $B_2O_3 + 16\% SiO_2$ as well as 41, 70, and 150% SiO_2 are shown for temperatures from 500° to 1300°C. The isotherms for the specific volumes all possess a maximum at about 20% SiO_2 . At low temperatures and high SiO_2 concentrations (10 to 15%) the specific volume obeys an additive law. This shows that the structure of the melt at these temperatures corresponds to the structure of a glass, $B_2O_3-SiO_2$, found by Warren.

PROCESSING AND PROPERTIES INDEX

2

Surface tension at the boundary between antimony and boric anhydride. A. A. Leont'eva (Geol. Inst., Acad. Sci. U.S.S.R.). *J. Phys. Chem.* (U.S.S.R.) 19, 388 01 (1945).—Sessile drops of Sb molten and solidified under B_2O_3 are measured at room temp., and the interfacial tension is calcd. It is about 350 ergs/sq. cm. and is supposed to represent within 10% the interfacial tension at the m.p. of Sb. Addn. of SiO_2 to B_2O_3 reduces the tension.
J. J. Bikerman

ASM-A6A METALLURGICAL LITERATURE CLASSIFICATION

107300 P1 1073003 MIP ONY ONE BILLIOTONE 091121 ONE ONE 101

CA

Surface phenomena in the system slag-metal. A. A. Leont'eva (Acad. Sci. U.S.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 50, 321 (1945). To obtain information on the separ. of metal and melt from slag, an exper. study was made of several nonferrous systems. Slag from a melt of the given metal was melted in a graphite crucible in a Kryptol furnace, and to it was added a 2 to 3 g. piece of the metal. After holding the slag for about 1 hr. in the viscous liquid condition, it was slowly cooled during the course of 5 to 6 hrs. Temp. measurements were made of the furnace space with a Pt-PtRh thermocouple. Surface tension values were obtained from the size of the drops of metal at the bottom of the crucible. In a fayalite slag from a Cu-melting furnace (analysis: 21.22 SiO₂, 0.43 Al₂O₃, 41.40 FeO, 0.65 MnO, 1.20 CaO, 0.20 MgO, 20.33 ZnO, 1.12 CuO, 0.41 PbO, 0.06 SrO, 0.02 SnO, 0.04 S, and 0.24% Si), small spheres of Cu were found after slow cooling, from which a surface tension of 670 dynes/cm. was calcd. for the m.p. of Cu. The Cu particles had a black, magnetic coating, and the contact surface of the slag contained fayalite crystals. Slag from a Pb-melting furnace contained irregular Pb particles of Pb before and after testing. No quant. estimate of the low surface tension value was possible. The surface tension of Sn was 380 dynes/cm. in a slag from a Sn-melting furnace (contg. 25-35 SiO₂, 15-25 FeO, 8-12 Al₂O₃, and 8-12% CaO). Thus, high surface tension promotes the separ. of metal from the slag. A. G. Guy

LEONT'YEVA, A. A.

A. A. Leont'eva, The investigation of the linear rate of crystallization in the system; Albite-Anorthite-Diopside. $\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 6\text{SiO}_2 - \text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 - \text{MgO} \cdot \text{CaO} \cdot 2\text{SiO}_2$. Pp.1205-13.

In this work are described experiments on the crystallization of several glasses of the system Albite-Anorthite-Diopside. The purpose of the work was to clear up the crystalline character of the phases which are evolved simultaneously in the system of the non-eutectic type.

Academy of Sciences U.S.S.R.
Inst. of Geological Sciences
Dept. of Technical and Experimental
Petrography, Moscow
December 24, 1947

SO: Journal of Physical Chemistry (USSR) 22, 10, 1948.

LEONTIEVA, A. A.

USSR/Viscosity
Silicates

Feb 1947

"The Temperature Dependence of the Viscosity of
Molten Silicate," A. Leontieva, 10 pp

"Acta Physicochimica" Vol XXII, No 2

An equation for the dependence of viscosity on temperature, which is valid for molten silicates in the range of the viscous liquid state and for molecular liquids. In particular, liquids with homopolar bonds, but not for liquids with ionic bonds, e.g., salts, borax and boric anhydride.

9T23

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721 AND 7

LEONT'YEVA, A. A.

USSR/Chemistry
Chrystallization
Minerals

Jan 1947

"Effect of Pressure on the Linear Speed of Crystallization of Molten Mineral Rock,"
M. P. Volarovich, A. A. Leont'yeva, 2 pp

"Dok Ak Nauk SSSR" Vol LV, No 3

Submitted by D. S. Belyankin, Institute of Geological Sciences, Academy of Sciences of the USSR, 24 Sep 46. This is of great interest to those interested in the genesis of mineral deposits. Cites example of greater crystallization of glass, SiO_2 - Na_2O , under pressures of 200-500 kilograms per square centimeter than under ordinary atmospheric pressure.

PA T12

LEONT'YEVA, A. A.

PA 52T77

USSR/Minerals
Marble

Oct 1947

"The Crystallization of Two Olivine Basalts," A. A. Leont'yeva, Lab Experimental Petrography, Inst Geol Sci, Acad Sci USSR, 64 pp

"Zapiski Vserossiyskogo Mineralogo Obshchestva" Series 2, Part LXXVI, No 3

Discusses experiments conducted to study crystallization of basalts. Tests conducted on basalt samples obtained from various sources. Linear speed of crystallization studied by measuring separate crystals at various stages of their formation.

52T77

The linear rate of crystallization in the system albite-anorthite-diopside. A. A. Leont'ev. *Zhur. Fiz. Khim.* (J. Phys. Chem.) 22: 1906-73(1948).—Samples (about 0.05 g. each) of glass prep'd. by melting of diopside (I), with albite (II), or anorthite (III) or, both were heated for some min. and the crystals formed near the surface were measured. Division of the crystal length by the duration of heating yielded the rate; ρ , of crystals, which proved to be independent of the duration of heating. For 6 glasses, ρ had a max. at a temp. T which was 1220° ($\rho = 11.04$ cm./min.) for $50\% \text{ I} + 40\% \text{ II}$, 11190° (0.03 cm./min.) for $50\% \text{ I} + 40\% \text{ III}$, 11190° (0.007) for $40\% \text{ I} + 60\% \text{ II}$, 1220° (0.03) for $55\% \text{ I} + 20\% \text{ II} + 25\% \text{ III}$, 1220° (0.03) for $35\% \text{ I} + 25\% \text{ II} + 40\% \text{ III}$, and 1180° (0.01) for $30\% \text{ I} + 30\% \text{ II} + 40\% \text{ III}$. The ρ values given for the 2 last-named glasses are for III and plagioclase, resp.; the ρ of I, which also crystd. from these glasses, was smaller. For 2 glasses ($60\% \text{ I} + 40\% \text{ III}$ and $40\% \text{ I} + 20\% \text{ II} + 40\% \text{ III}$) ρ was almost independent of temp. between 1130° and 1230° (ρ was 0.01 and 0.006 cm./min., resp.). In the glasses contg. I and II, crystals of I formed. In ternary glasses, the more abundant component crystd. first. The viscosity of 4 glasses was det'd. between 1230 and 1400° ; the temp. of crystals revealed itself by a kink in the curve "vs. against $1/T$." J. J. Bikerman

LECHT'YEV, A.A.

"The Effect of Free Carbon upon the Inter-Phase Surface Tension in the Silicate-Iron
Sulphide System."

Kolloid. Zh., 11, No. 3, 1949. Inst. of Geol. Sci., Acad. Sci. USSR, Dept. Tech. and
Exp. Petrography, -1948-.

LEONT'Yeva, A. A.

26245 Vliyanie soderzhaniya kisl'oroda zheleza na lineynuyu skorost' kristallizatsii
tverdykh fazy v baikal'skikh steklakh trudy in-ta geol. nauk (akad. nauk SSSR)
byp. 106, petrogr. seriya, No. 30, 1949, s. 33-46 Bibliogr: 7 NAYEB

SO: LETOPIS' No. 35, 1949

CA

Calculation of the linear rate of crystal growth of plagioclase. A. A. Leont'eva (Acad. Sci. U.S.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 68, 145 7(1969). Vol. IV. *Ann. of Volmer's (Die Chemische Kristallbildung)* and *Kinetik der Phasebildung*, 1939 (C. 4. 33, 8270) and Frenkel's (C. 4. 39, 4274) theory, the const. of the equation for the rate of crystal growth are calcd. from measurements of three different plagioclase compns. grown in basalt melts. The agreement between the theoretical curves and the observed rates, as functions of the undercooling degree is satisfactory. The energy of the formation of a two-dimensional nucleus of the surface tension of the undercooling is derived, in which the surface tension of the nucleus is included. From the analogy with the thickness of liquid films on solid walls, and an assumed thickness of 10⁻⁶ cm. for the layer on the nucleus, the surface tension is calcd. to be about 3 ergs sq. cm., in a good agreement with what was assumed to be the surface tension at the phase boundary between crystal and melt. The const. in Frenkel's equation for the three observed plagioclases are so little different that the mentioned value is equally valid for all of them. W. Fintel

LEONT'YEVA, A.A.

Crystallography

Effect of the content of iron oxides on the linear rate of crystallization of solid phases in tachylites. Trudy Inst. geol. nauk AN SSSR No. 106, 1949

Monthly List of Russian Accessions, Library of Congress, December, 1952 UNCL.

2

Temperature dependence of the viscosity of molten boric anhydride. A. A. Leont'eva (Inst. Geol., Moscow). *Zhur. Fiz. Khim.* 24, 798-801 (1950).—A review of literature data shows that the equation $\eta = A \exp(B/RT)$ is satisfied between 800 and 1100° by B_2O_3 (I), $B_2O_3 + 10\% K_2B_4O_7$ (II), $B_2O_3 + 15.5\% K_2B_4O_7$ (III), and $B_2O_3 + 20\% Na_2B_4O_7$ (IV). The sp. vol. is v . The activation energy $A \times 10^{-3}$ cal/mol. is 1.31 (I), 1.30 (II), 1.30 (III), 1.07 (IV). The values of $\log A$ are, resp., -0.100, -0.4410, -0.501, -1.635. The energy required for making a hole is thus the same in pure B_2O_3 or in mixts. of B_2O_3 with $K_2B_4O_7$. The presence of Na on the other hand increases A and decreases v considerably. Mixts. II and III are convenient as high-temp. viscometric fluids. M. B.

LEONT'YEVA, A. A.

USSR/Chemistry - Iron Ores

May/Jun 51 -

"Viscosity of Iron-Containing Silicate Melts in the Heterophase Region," A. A. Leont'yeva, Inst Geol Sci

"Kolloid Zhur" Vol XIII, No 3, pp 192-195

Measured viscosity of glass melts fused from basalt (contg iron oxides) in N_2 and H_2 atms. Calcd relative increase in vol on formation of solid phase (crystn of iron oxides) from melt with large content of iron oxides.

ID

183T19

LEVIN, A. A.

"Computing Linear Velocity of Crystallization of Solid Phases in Silicate Melts" p. 119

~~"Synthesis and Structure of Hydrosilicates containing Simple and Complex Heavy Metal Cations" p. 38~~

Transactions of the Fifth Conference on Experimental and Applied Mineralogy and Petrography, Trudy ... Moscow, Izd-vo AN SSSR, 1958, 516pp.

reprints of reports presented at conf. held in Leningrad, 26-31 Mar 1956. The purpose of the conf. was to exchange information and coordinate the activities in the fields of experimental and applied mineralogy and petrography, and to stress the increasing complexity of practical problems.

LEONT'YEVA, A. G.

Leont'yeva, A. G. "On regastro-enterostomy," Trudy Medinstituta (Izhev, gos. med. in-t), Vol, VII, 1949, p. 294-96

SO: U-3850, 16 June 53 (Ietopis 'Zhurnal 'nykh Statey No, 5, 1949)

KUTATELADZE, Samson Semenovich; LEONT'YEVA, Aleksandr Ivanovich;
SHPAKOVSKAYA, L.I., red.; OVCHINNIKOVA, T.K., tekhn. red.

[Turbulent boundary layer of compressible gas] Turbulentnyi
pogranichnyi sloi szhimaemogo gaza. Novosibirsk, Izd-vo
Sibirskogo otd-niia AN SSSR, 1962. 179 p. (MIRA 16:6)
(Boundary layer) (Fluid dynamics)

MIROSHNICHENKO, I.I.; PAVLOVA, A.M.; LEONT'YEVA, A.M., kandidat sel'skokho-
zyaystvennykh nauk, redaktor.

[Chick-pea] Nut. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1953. 111 p.

(MLA 7:1)

(Gram (Grain))

RM
EPF(c)/EPT(m)

AP5022694
L 00736-0
ACCESSION NR:
Shutkin, D

AUTHOR:

AUTHOR: Bol'shakov

TITLE: Hardness of crystalline monomers

ABSTRACT: The hardness of crystalline monomers is determined by the strength of the intermolecular bonds. The hardness of the monomers is determined by the strength of the intermolecular bonds. The hardness of the monomers is determined by the strength of the intermolecular bonds.

TITLE: Hard
tverdogo tela;
solid state

SOURCE:

SOURCE: The specimens were prepared by the authors study the effect of temperature and hydrogen on the hardness of the specimens sealed cryostat surface. The specimens were placed at nitrogen and hydrogen, the specimens were placed at nitrogen and hydrogen, the specimens were placed at nitrogen and hydrogen.

[illegible]

Card 1/4

UR/0081/65/007/009/2607/2611

5.3/17

L 00736-66

ACCESSION NR: AP5022694

is penetration of the indenter when the load is increased from 10 to 200 g. Since the hardness H , measured by the conical indenter, is independent of the load, then

$$H = \frac{P}{\pi h^2} = \frac{P_1}{\pi h_1^2}$$

and consequently

$$H = \frac{P}{\pi \left(\sqrt{\frac{P_1}{\pi H}} + h_1 \right)^2}$$

from which the following relationship was derived for calculating the hardness

$$H = \frac{(\sqrt{P} - \sqrt{P_1})^2}{\pi h_1^2}$$

The hardness of crystalline methane is given as a function of temperature in fig. 1 of the Enclosure. Curves for argon and krypton are given for comparison (C. Trepp, *Schweizer archiv.*, Bd. 24, 191, 230, 1958). A reduction in temperature was found to reduce the creep effect in solid methane. A physical explanation is given for the effect of temperature on hardness and creep on the basis of the dislocation

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000929310015-1"

Card 2/4

L 00736-66

ACCESSION NR: AP5022694

theory. "In conclusion, the authors thank ⁵⁵B. Ya. Sukharevskiy for help in the work and valuable advice, and ⁵⁵V. Z. Bengus for consultation." Orig. art. has: 4 figures, 8 formulas, 1 table. 6

ASSOCIATION: Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR, Kharkov (Physicotechnical Institute of Low Temperatures, AN UkrSSR) ⁵⁶

SUBMITTED: 15Feb65

ENCL: 01

SUB CODE: 55

NO REF SOV: 003

OTHER: 005

Card 3/4

L 00736-66

ACCESSION NR: AP5022694

ENCLOSURE: 01

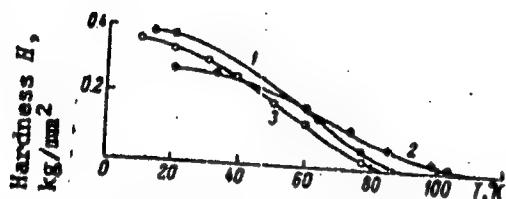


Fig. 1. Curves for hardness as a function of temperature in CH₄ (1); Kr (2); Ar (3).

Card

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S/128/63/000/001/007/008
A004/A127

AUTHORS: Leont'yeva, A.V., Batuner, Yu.Ye., Likhachav, R.B.

TITLE: Improving the quality of the AJI 8 (AL8) alloy

PERIODICAL: Liteynoye proizvodstvo, no. 1, 1963, 37

TEXT: To reduce the amount of oxides in the AL8 alloy it is refined for 5 - 8 minutes at 700 - 720°C under intense stirring in vertical direction, while the surface of the melt is continuously covered with a carnallite flux. The slag is removed from the surface, new flux is added and the metal is poured at 700 - 720°C, which increases the mechanical properties of the alloy as follows: $\sigma_b = 30.8 + 32.5 \text{ kg/mm}^2$, and $\delta = 9 + 11.6\%$ after heat treatment. If AL8 alloy with beryllium and titanium additions is produced, it is recommended to refine the alloy by mixing the flux layer over a depth of 100 - 150 mm. Corrosion tests of specimens produced by this technology showed that AL8 alloy parts containing titanium and improved by refining showed the highest corrosion resistance.

Card 1/1

LECNT'YEVA, A.V.; BATUNER, Yu.Ye.; LIKHACHEV, R.B.

Improving the quality of the AL8 alloy. Lit. proizv.
no.1:37 Ja '63. (MIRA 16:3)
(Aluminum-magnesium alloys--Metallurgy)

YANKOVSKIY, V.D., [Iankova'kyi, V.D], LEONT'YEVA, G.A. [Leont'ieva, H.O]

Significance of early restoration of cerebral functions for the
resuscitation of a dead organism [with summary in English].

Fiziol. zhur. Ukr. 4 no.5:575-584 S-O '58

(MIRA 11:11)

1. Institut fiziologii im. A.A. Bogomol'tsa AN USSR, Laboratoriya
sravnitel'noy i vozrastnoy fiziologii.

(RESUSCITATION)

(BRAIN)

UKOLOVA, M.A.; LEONT'YEVA, G.A.

Thrombokinase activity of the tissues in various endocrine disorders and tumor growths. *Biul. eksp. biol. i med.* 49 no.3:26-30 Mr '60.

(MIRA 14:5)

1. Iz eksperimental'nogo otdela (zav. - prof. M.A.Ukolova) Rostovskogo-na-Donu gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii, radiologii i onkologii (dir. P.N.Snegirev) Ministerstva zdravookhraneniya RSFSR. Predstavlena deystvitel'nym chlenom AMN SSSR V.N.Chernigovskim.

(ENDOCRINE GLANDS--SURGERY)

(TUMORS)

(THROMBOPLASTIN)

GORKIN, V.Z.; KRIVCHENKOVA, R.S.; Primarni uchastnye: KITROSSKIY, N.A.;
LEONT'YEVA, G.A.

Mechanism of inhibition of the blood amine oxidase (spermine oxidase);
activity by isoniazid. Vop.med.khim. 10 no.2:149-154 Mr-Apr '64.
(MIRA 18:1)

1. Laboratoriya biokhimi aminov i drugikh azotistykh osnovaniy
Instituta biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

GORKIN, V.Z.; KITROSSKIY, N.A.; KLYASHTORIN, L.B.; KOMISSAROVA, N.V.;
LEONT'YEVA, G.A.; PUCHKOV, V.A.

Substrate specificity of amino acid oxidase. Biokhimiya 29 no.1:
88-96 Ja-F '64. (MIRA 18:12)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR i
Institut khimii prirodnikh soedineniy AN SSSR, Moskva.
Submitted April 28, 1963.

SERGEYEVA, Z.I.; LEONT'YEVA, G.F.

Selection and substantiation of the method of determining moisture content of orange and lemon paste candy and "sefir pastila" candy for the regulation of the drying process. Trudy VKNII no.16:51-57 '62.

(MIRA 16:5)

(Moisture--Measurement) (Confectionery)

LEONT'YEVA, G.G.

AUTHOR KRICHEVSKIY I.R., YEFREMOVA G.D., LEONT'YEVA G.G. PA - 2760
 TITLE On thermal stability of complexes formed by urea with organic
 compounds.
 (O termicheskoy ustoychivosti kompleksov mocheviny s organiches-
 kimi veshchestvami.- Russian)
 PERIODICAL Doklady Akademii Nauk SSSR 1957, Vol 113, Nr 4, pp 817-819
 (U.S.S.R.)
 ABSTRACT Received: 6/1957 Reviewed: 6/1957
 Urea forms orySTALLINE complexes with nearly all types of organic
 compounds that have a straight chain: hydrocarbons, ethers,
 aldehydes, acids, alcohols, etc. The opinion prevails that at
 temperatures of more than 132,7°, i.e. at the melting point of
 urea, these complexes cannot exist. Although no such complexes
 have hitherto been discovered, it is nevertheless unexplainable
 from a thermodynamic point of view why 132,7° should be the
 upper limit for the existence of such a complex. Thermal con-
 stancy increases with the length of the chain of organic com-
 pounds. The thermal constancy of a complex obtained from a
 mixture of organic substances is higher than that which is due
 to individual compounds forming a mixture. On their search for
 complexes that are constant at temperatures of more than 132,7°

CARD 1/ 3

CAR

...ent liquid
 one purpose. The
 ...similar to that described
 with paraffin ends at 124,5°,
 ...exceeds the melting point of

On thermal stability of complexes formed by urea with compounds. PA - 2760

urea and tends towards $141,0^{\circ}$ (see above). Furthermore, the complex with cetane was investigated, where urea probably partly decays, and where the curve of solubility intersects the constancy curve of the complex at 99° . Besides, some qualitative observations concerning the forming of the complex were made. Thus it was shown by the examples of urea complexes with ceresin that the melting point of urea ($132,7^{\circ}$) by no means forms a limit for the existence of this complex, but that it is constant up to 141° .

ASSOCIATION: State Scientific Research- and Projecting Institute for the Nitrogen Industry.

PRESENTED BY: A.N. FRUMKIN, member of the Academy.

SUBMITTED: 28.11. 1956

AVAILABLE: Library of Congress.

CARD 3/3

86676

S/064/60/000/008/003/008
B020/B060

15.8112

AUTHORS: Yefremova, G. D., Leont'yeva, G. G.

TITLE: Solubility of Melamine in Solutions of Dicyano Diamide in Liquid Ammonia

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 8, pp. 8-9

TEXT: The solubility of melamine in ammoniacal solutions of dicyano diamide, being of particular importance in the first stage of continuous melamine production from dicyano diamide (Ref. 1), was studied in sealed glass ampoules by the method described in Ref. 2. The data obtained (Figs. 1 and 2) show the solubility of melamine to be dependent upon the concentration of dicyano diamide in liquid ammonia. For a dicyano diamide content of 9.2 g/100 g ammonia the solubility of melamine is little dependent on temperature; on a further increase of the dicyano diamide concentration in the solution a change is observed in the character of the solubility curve; with a rise of temperature also the melamine concentration in the solution rises. Fig. 2 shows that for dicyano diamide concentrations of about 14 g/100 g NH_3 the solubility of melamine is independent of

Card 1/2

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86676

Solubility of Melamine in Solutions of
Dicyano Diamide in Liquid Ammonia

S/064/60/000/008/003/008
B020/B060

X

temperature. Since in the synthesis of melamine from dicyano diamide by the continuous process the $\text{H}_4\text{C}_2\text{N}_4$ concentration in liquid ammonia is 50% and the temperature of the solvent is $\sim 70^\circ\text{C}$, the melamine content in such a solution should not exceed 1%. It also follows from results that the sign of the solution heat changes with a rise of dicyano diamide concentration in the solution. There are 2 figures and 3 Soviet references.

Card 2/2

YEFREMOVA, G.D.; LEONT'YEVA, G.G.

Solubility of melamine in solutions of dicyandiamide in liquid
ammonia. Khim.prom. no.8:626-267 D '60. (MIRA 13:12)
(Melamine) (Guanidine) (Ammonia)

YEFREMOVA, G.D.; LEONT'YEVA, G.G.

Compressibility of mixtures of ammonia and carbon dioxide,
and the equilibrium of reactions involved in urea
synthesis. Khim.prom. no.10:742-747 9 '62. (MIRA 15:12)
(Urea) (Ammonia)
(Carbon dioxide)

YEFREMOVA, G.D.; LEONT'YEVA, G.G.

Solubility of nitrocyclohexane in aqueous solutions of nitric
acid and nitrates. Zhur.ob.khim. 33 no.7:2090-2093 JI '63.
(MIRA 16:8)
(Cyclohexane) (Solubility) (Nitric acid)

BRUSOVA, L.V.; GORKIN, V.Z.; ZHELYAZEV, D.K.; KIROVSKIY, N.A.;
LEONT'YEVA, G.A.; SEVERINA, I.S.

New spectrophotometric method for determining monoamine oxidase
activity in liver homogenates. Vop. med. khim. 10 no.1:83-89
Ja-F '64. (MIRA 17:12)

1. Institute of Biological and Medical Chemistry, Academy of
Medical Sciences of the U.S.S.R., Moscow.

GOVYBIN, V.A.; 1968, 1968.

Distribution of catechol amines in the myocardium of vertebrates.
Zhur. evol. biokhim. i fiziol. 1 no.1:32-44 Jan-F 1968.

(MIRA 18:6)

1. Laboratoriya evolyutsii adaptatsionno-troficheskoy funktsii
nervnoy sistemy Instituta evolyutsionnoy fiziologii i biokhimii
im. I.M. Sechenova AN SSSR, Leningrad.

GOVYRIN, V.A.; LECNT'YEVA, G.R.

Effect of elimination of the sympathetic innervation on the content and accumulation of catechol amines in the cardiac muscle of the frog. Fiziol. zhur. 49 no.5:566-569 My '63.

(MIRA 17:11)

1. From the Sechenov Institute of Evolutionary Physiology, Leningrad.

GOVIRIN, V. A.; LEONT'YEVA, G. R.

Catechol amines of the bird heart in ontogenesis. Dokl. AN
SSSR 147 no.6:1510-1511 D '62. (MIRA 16:1)

1. Institut evolyutsionnoy fiziologii im. I. M. Sechenova
AN SSSR. Predstavleno akademikom V. N. Chernigovskim.

(Adrenaline) (Embryology—Birds) (Heart)

FORTUNATOV, N.S.; SLOBTSOV, L.Ye.; LEONT'YEVA, I.A.

Countercurrent precipitation of copper germanate. Ukr. khim.
zhur. 29 no.8:864-868 '63. (MIRA 16:11)

1. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut
mednoy promyshlennosti i Institut obshchey i neorganicheskoy
khimii AN UkrSSR.

KIREYEVA, M.V.; LEONT'YEVA, I.A.; REMPEL', P.S.

Thermodynamic investigation of certain reactions taking place in a furnace during the oxidizing roasting of chromite charges. Zhur. prikl. khim. 36 no.9:2079-2082 D '63.
(MIRA 17:1)

PLYSHEVSKIY, Yu.S.; LEONT'YEVA, I.A.; SMIRNOVA, G.M.

Physicochemical properties of Lariun hexaborate. *Zhur. neorg. khim.*
8 no.12:2811-2812 D '63. (MIRA 17:9)

L 14031-66 EWT(m)/EWP(t)/EWP(b)/EWA(h) IJP(c) JD

ACC NR: AP5028723

SOURCE CODE: UR/0363/65/001/011/1933/1937

AUTHOR: ^{44,55} Plyshevskiy, Yu. S.; ^{44,55} Smirnova, G. M.; ^{44,55} Tkachev, K. V.; ^{44,55} Leont'yeva, I. A.

ORG: ^{44,55} Ural Scientific Research Chemical Institute, Sverdlovsk (Ural'skiy nauchno-issledovatel'skiy khimicheskiy institut)

TITLE: Preparation and certain properties of lead borate ^{11 44,55} 61 B

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 11, 1965, 1933-1937

TOPIC TAGS: boron compound, lead compound, borate, chemical reaction, solid physical property, chemical composition, endothermic effect, exothermic effect

ABSTRACT: Lead borate $4\text{PbO} \cdot 5\text{B}_2\text{O}_3 \cdot 2.5\text{H}_2\text{O}$ was prepared by reacting lead monoxide with a 10% solution of B_2O_3 in H_3BO_3 . The effect of B_2O_3 concentration, temperature, and duration of the reaction on the composition of the product was studied. Lead borate was found to be practically insoluble in water; excess boric anhydride present in the lead borate obtained is washed out in water. Heating curves of lead borate were plotted, and the endothermic effects and one exothermic effect (a solid-state phase transition) are discussed. Heat capacity and thermal conductivity were determined at 100, 200, 300, and 350°C. Orig. art. has: 3 figures, 2 tables.

SUB CODE: 07/

SUBM DATE: 07Jan65/

ORIG REF: 003/

OTH REF: 003

UDC: 546.817'273

¹¹⁰
Card 1/1

ACC NR: AF6027190

(N)

SOURCE CODE: UR/0078/66/011/COS/1822/1826

AUTHOR: Flyshevskiy, Yu. S.; Garkunova, N. V.; Loont'yeva, I. A.; Zhitkova, T. M.

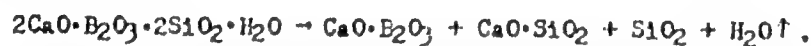
ORG: none

TITLE: Decomposition of datolite on heating

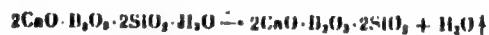
SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 8, 1966, 1822-1826

TOPIC TAGS: boron mineral, calcium mineral, borate, borate glass, silicate

ABSTRACT: The thermographic method was used to determine the heat effects associated with phase transformations and the heat capacity of the mineral datolite. The phase transformations were found to occur only above 920°. In the 950-980°C range, the mineral decomposes as follows:



Monocalcium borate $\text{CaO} \cdot \text{B}_2\text{O}_3$, monocalcium silicate $\beta\text{-CaO} \cdot \text{SiO}_2$, quartz $\alpha\text{-SiO}_2$, and SiO_2 -cristobalite are thus formed. At 1100°C, the mixture of newly formed compounds melts, forming borate glass. The heat of reaction of the datolite decomposition is 6.4 kcal/mole. The heat of reaction of the dehydration



Card 1/2

UDC: 546.824'42'273:542.92

L 45707-66
ACC NR: AP6027190

is 12.1 kcal/mole. The heat capacity of datolite between 100 and 500°C ranges from 0.19 to 0.52 cal/g. Calcined datolite and also calcined datolite ores can be used as boric microfertilizer, since they contain boron in the citric-soluble form. Orig. art. has 3 figures and 4 tables.

SUB CODE: 08/ SUBM DATE: 10Nov64/ ORIG REF: 006/ OTH REF: 001

Card 2/2 ULR

FD-2343

USSR/Physics - Pulse counter

Card 1/1 Pub. 146 - 8/34

Author : Khartman, V. G.; Leont'yeva, I. N.; Sinyavskiy, A. P.; and
Vasil'yev, L. V.

Title : Amplitude analyzer of pulses with electron-ray tube

Periodical : Zhur. eksp. i teor. fiz. 28, 699-705, Jun 1955

Abstract : The authors describe an analyzer of pulses with the use of an electron-ray tube. The device can classify into 20 channels pulses with amplitude up to 100 volts, with growth time greater than 0.1 microsecond, and with duration less than 30 microseconds. When the counting rate is 17,000 pulses/minute the omission constitutes about 1%. Stability of threshold of the channels is about 2%. They present the block schemes of the system and analyzer tube, a detailed circuit diagram forming the block, and photographs of the pulses. Four references, all non-USSR (W. Glenn, D. Watkins, E. Titterton).

Institution : -

Submitted : February 11, 1954

AUTHORS: Kucheryayev, A. G., Szhenov, Yu. K., SOV/56-34-3-50/55
Gogichayshvili, Sh. M., Leont'yeva, I. N.,
Vasil'yev, L. V.

TITLE: The Magnetic Nuclear Moments of Sr^{87} and Mg^{25}
(Yadernyye magnitnyye momenty Sr^{87} i Mg^{25})

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958,
Vol. 34, Nr 3, pp. 774-775 (USSR)

ABSTRACT: The authors found the gyromagnetic ratio of the nucleus Sr^{87}
by means of the method of magnetic resonance in molecular
beams (ref. 1). This molecular beam consisted of strontium
atoms which made possible the elimination of the inter-
molecular interactions as well as an exact taking into
account of diamagnetic correction. The 378 cm long strontium-
atom beam was detected by means of the method of surface
ionization on a heated tungsten wire circumflowed by an
oxygen current. The ions of strontium 87 were separated by
a magnetic analyzer and were recorded by an electronic
multiplier and a galvanometer. The value of the gyromagnetic
ratio g of the nucleus is determined from the equation

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The Magnetic Nuclear Moments of Sr^{87} and Mg^{25}

SOV/56-34 -3-50/55

$$g = 1.3122 \cdot 10^{-3} f_p / H_p$$

where f_p denotes the resonance frequency of the oscillating field, and H_p denotes the corresponding resonance value of the constant magnetic field (in which the transitions take place). The resonance values f_p and H_p correspond to the minimum intensity of the refocused beam. The measurements were carried out according to the method of the invariable field as well as the method of invariable frequency. Also the fluctuations of the intensity of the atom beam were taken into account by means of two different methods shortly discussed. The maximum error of these measurements is estimated to amount to 0.12 %. From 26 measurement series the following mean value for the gyromagnetic ratio is obtained:

$$g(\text{Sr}^{87}) = 0.2423 \pm 0.0003$$

Card 2/3

this coincides within the error limits with the value

The Magnetic Nuclear Moments of Sr^{87} and Mg^{25}

SOV/56-34-3-50/55

determined by C. D. Jeffries (Dzhefris) and P. B. Sogo (Ref 4) according to the method of "nuclear induction". The diamagnetism, of the atom demands the following correction;

$$H_{\text{true}} = (1 - \sigma)H_{\text{measured}}$$

Here H_{true} denotes the true value of the magnetic field strength at the place of the nucleus. According to W. C. Dickinson (Dickinson) (Ref 5) here holds $\sigma = 0.00345$. Taking into account this correction as well as the unknown value of the spin of Sr^{87} ($I = 9/2$) the value of μ (Sr^{87}) $= 1.0939 \pm 0.0014$ nuclear magnetons is obtained for the magnetic moment of the nucleus of Sr^{87} . There are 6 references, 0 of which are Soviet.

SUBMITTED: December 25, 1957

Card 3/3

BEGUCHEV, P.P. and LEONT'YEVA, I.P.

"Radical Improvement of Natural Grasslands on Solonchaks Complexes
of the Lower Volga Desert Steppe."

Stalingrad Agricultural Institute for Beguchev, P.P.
report to be presented at the 8th Intl Grassland Congress, Reading, England, 11-21 Jul'60.

TERYUSHNOV, A.V., doktor tekhn. nauk, prof.; LEONT'YEVA, I.S., aspirantka

Effect of fiber straightness and parallelism and setting
parameters of the drafter on the drawing stresses. Tekst.
prom. 25 no.10:14-18 0 '65. (MIRA 18:10)

1. Moskovskiy tekstil'nyy institut.

KOGUROVA, M.I.; VOROB'YEVA, Ye.S.; LEONT'YEVA, K.A.

Experience in a polyclinic rheumatological service. Kaz. med.
zhur. 4:73-74 J1-Ag'63 (MIRA 17:2)

1. Poliklinika No.7 (glavnyy vrach - V.D.Potukin) g. Kazani
(nauchnyy rukovoditel' raboty - prof. L.M.Rakhlin).

197/1977 A. B. D.

Oct. 1947

Medicine - Spectral Analysis
Medicine - Albumin

"Absorption Spectrum of Structural Albumin of Muscles in the Ultraviolet Range," L. M. Ravikovich, G. M. Fetkina, A. P. Leyont'eva, Lab Phys Chem, Inst Biol and Med Chem, Acad Sci USSR, 4 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LXIII, No 3

Gives results of experiments conducted to study the absorption spectrum of muscle albumin in the ultraviolet range, and use of spectrographic method for future study of the kinetics of the processes of interrelation between myosin and actomyosin with ATP (adenosinephosphoric acid). Submitted by Academician Ya. O. Parnas, 20 June 1947.

h9764

LEONT'YEVA, K. D.

67T26

USSR/Chemistry - Spectra, Absorption
Chemistry - Albumins

"Variations in the Spectral properties of the Structural Albumins of the Muscles in the Presence of Adenosin-Triphosphoric Acid," Kh. M. Ravikovich, O. N. Setkina, K. D. Leont'yeva, Inst of Biol and Med Chem, Acad Med Sci USSR, 4 pp

"Dok Ak Nauk SSSR, Nov, Ser" Vol LX, No 6, 1948

Describe results of studies conducted on the absorption spectra of albumin and adenosin-triphosphoric acid (ATP) in the ultraviolet band of the spectrum to determine the physical and chemical properties of myosin and actomyosin, and their variations in the presence of ATP. Submitted by Academician Ya. O. Parnas 25 Mar 1948.

LEONT'YEVA, K.D.

AMELIN, A.G.; BALEYEV, A.V.[deceased]; BRUTSKUS, Ye.B.; KEL'MAN, F.N.;
OSHEROVICH, R.Ye.; STEPANOV, M.N.; CHEPELEVITSKIY, M.L.; CHERNO-
BAYEVA, M.M.; MIKHAL'CHUK, B.V., redakter; LEONT'YEVA, K.D., re-
dakter; SHPAK, Ye.G., tekhnicheskij redakter.

[Methods of analyzing and controlling the production of sulfuric
acid and superphosphates] Metody analiza i kontrolya proizvodstva
sernei kisloty i superfosfata. Sost. A.G.Amelin i dr. Pod red.
B.V.Mikhal'chuka. Moskva, Gos.nauchno-tekhn. izd-vo khim. lit-ry,
1955. 159 p. (MLRA 9:5)

1.Moscow. Nauchnyy institut po udebreniyam i insektitsidam.
(Sulphureic acid) (Phosphates)

LEONT'YEVA, K.D.

SECHEPRACHEVA, Margarita Avgustovna; LEONT'YEVA, K.D., redaktor;
KORNEYEVA, V.I., tekhnicheskii redaktor

[Chemical methods of analyzing rubber] Khimicheskie metody
analiza reziny. Moskva, Gos. nauchno-tekhn. izd-vo khim.
lit-ry, 1957. 122 p. (MIRA 10:4)
(Rubber--Analysis)

LUR'YE, Yuliy Yul'yevich; RYBNIKOVA, Anastasiya Invanovna; LEONT'YEVA, K.D.,
red.; SHPAK, Ye.G., tekhn.red.

[Chemical analysis of industrial sewage] Khimicheskii analiz proizvod-
stvennykh stochnykh vod. Moskva, Gos. nauchno-tekhn. izd-vo khim.
lit-ry, 1958. 187 p. (MIRA 11:3)
(Sewage--Analysis) (Sanitary chemistry)

SOV/137-58-9-20245

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 303 (USSR)

AUTHOR: Leont'yeva, K.D.

TITLE: Phase Analysis for Zinc Compounds of Ores Containing Arsenic and Vanadium (Fazovyy analiz rud, soderzhashchikh mysh' yak i vanadiy, na soyedineniya tsinka)

PERIODICAL: Sb. nauchn. tr. Gos. n.-i. in-t tsvetn. met., 1958, Nr 14, pp 93-102

ABSTRACT: The presence of As and V minerals (adamine and desclozite) in oxidized ores leads to errors in the determination of Zn in calamine and sphalerite. To eliminate the errors indicated the following selective solvents are chosen: 5% solution of Cu sulfate for calamine and 1% solution of HCl for desclozite. The total Zn content in the specimen is determined by the usual method but for the determination of Zn in calamine and adamine 0.5-2.0/g test samples are treated with 100 cc of a 2% solution of tartaric acid for 10 min at 18-20°C. The residue is filtered off and the Zn from adamine in the filtrate is determined polarographically. The residue is treated by the Low mixture for 2 hours at 50-60°, ammonia is then added, and the

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SOV/137-58 9-20245

Phase Analysis for Zinc Compounds of Ores (cont.)

whole is filtered. The smithsonite Zn is determined in the filtrate. To the residue left after the treatment with the Low mixture, 100 cc of 1% HCl solution are added and, keeping a constant volume, the mixture is stirred for one hour at 95-98°. The descloizite Zn is determined in the filtrate. There upon the residue is leached out with 100 cc of a solution of Fe chloride at 95-98° and filtered, and the sphalerite Zn is determined in the filtrate. The residue, undecomposed after all the leachings, is dissolved by a mixture of HNO₃ and H₂SO₄ and the Zn is determined therein. To determine Zn in calamine and smithsonite 50 cc of 50% Cu sulfate solution is added to a 0.5-2.0/g test sample and the mixture is boiled for three hours while maintaining a constant volume. The residue is filtered off and the solution is neutralized with ammonia to Congo red and to every 100 cc of solution 10 drops of HCl (sp gr 1.19) are added, then 2-2.5 g of powdered Al are mixed in, and the mixture is kept for 1-1/2 hours at 50-60°. The precipitated Cu is filtered off, a little Al having been put on the filter. In the filtrate Zn is determined polarographically. The results of all the determinations are added up and the resulting total is compared to the total Zn contents. The permissible deviation is $\leq 10\%$ (relative).

1. Zinc--Determination 2. Ores--Analysis 3. Polarographic analysis F.I.
Card 2/2 ---Applications

LEONT'YEVA, K.D.

SOV/137-58-8-18090

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 268 (USSR)

AUTHORS: Solntsev, N.I., Leont'yeva, K.D.

TITLE: Analysis of the Phases of Tungsten Ores and Concentrates
(Fazovyy analiz vol'framovykh rud i kontsentratsiy)

PERIODICAL: Sb. nauchn. tr. Gos. n. -i. in-t tsvetn. met., 1958, Nr 14,
pp 155-168

ABSTRACT: A method of phase analysis is described which permits one to determine separately the W of tungstite, scheelite, wolframite, and hübnerite. The weighted test sample is treated with NH_4OH (sp gr 0.91) at 60°C during 4 hours and filtered. After the removal of NH_3 by boiling and using Ti^{3+} as a reducing agent the tungstite W in the solution is determined photocolourimetrically with rhodanide. The residue is again dissolved in 1-N $\text{H}_2\text{C}_2\text{O}_4$ solution at 20° during 2 hours and filtered. In the solution scheelite W is determined gravimetrically after decomposing $\text{H}_2\text{C}_2\text{O}_4$ with return aqua regia or colorimetrically in oxalic-acid solution. The residue is treated for 20 min with 2,4-N HCl solution at 100° and filtered. In the solution the hübnerite or wolframite W is determined. If both minerals are present

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SOV/137-58-8-18090

Analysis of the Phases of Tungsten Ores (cont.)

then the ratio of the W minerals is determined according to a graph and the W contents of each of them is calculated. In the insoluble residue the remaining W is determined. It is indicated that in minerals in which both hubnerite and wolframite are present the precision of the determination of each of these minerals is decreased.

A. M.

1. Tungsten ores--Analysis
2. Tungsten--Determination

Card 2/2

LYALIKOV, Yuriy Sergeyevich; AGASYAN, P.K., retsenzent; LEONT'YEVA,
K.D., red.; SHEPAK, Ye.G., tekhn.red.

[Physicochemical methods of analysis] Fiziko-khimicheskie
metody analiza. Izd.3. Moskva, Gos.nauchno-tekhn.isd-vo
khim.lit-ry, 1960. 438 p. (MIRA 13:5)
(Chemistry, Analytical)

ALIMARIN, Ivan Pavlovich; FRID, Berta Izrailevna; LEONT'YEVA, K.D.,
red.; KOGAN, V.V., tekhn. red.

[Quantitative microchemical analysis of minerals and ores;
laboratory manual] Kolichestvennyi mikrokhimicheskii analiz
mineralov i rud; prakticheskoe rukovodstvo. Moskva, Gos.
nauchno-tekhn.izd-vo khim.lit-ry, 1961. 399 p.

(MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'-
nogo syr'ya (for Alimarin, Frid)
(Mineralogical chemistry) (Microchemistry)

LEONT'YEVA, K.D.; SAMOXHVALOVA, L.G.; SHELANKOVA, R.V.

Determination of iron bound with sphalerite in zinc concentrates containing pyrrhotine. Sbor. nauch. trud. Gintsvetmeta
no.19:773-778 '62. (MIRA 16:7)

(Zinc ores--Analysis)
(Iron--Analysis)

LEONT'YEVA, K.D.; SAMOKHVALOVA, L.G.

~~XXXXXXXXXXXX~~
Determination of small contents of silver in ores and ore
dressing products. Sbor. nauch. trud. Gintsvetmeta no.19:
706-709 '62. (MIRA 16:7)

(Ores--Analysis)
(Silver--Analysis)

LEONT'YEVA, K.D.; BOGOMOLOVA, V.D.; SAMOKHVALOVA, L.G.

Determining the forms in which tellurium is found in copper
electrolyte slimes and products of their treatment. Sbor. nauch.
trud. Gintsvetmeta no.19:743-749 '62. (MIRA 16:7)

(Copper industry—By-products) (Tellurium)

LEONT'YEVA, K.D.

Phase analysis for copper compounds in tailings from the
treatment of copper ores and intermediate products by the combined
Mostovich method. Sbor. nauch. trud. Gintavetmeta no.18:118-126 '61.

(MIRA 16:7)

(Tailings (Metallurgy)—Analysis)
(Copper—Analysis)

LEONT'YEVA, K.D.; SHELANKOVA, R.V.

Determining oxidized tellurium in metallic tellurium.

Sbor. nauch. trud. Gintsvetmeta no.23:383-388 '65.

(MIFA 18:12)

DAM'YANENKO, A.P.; IZUMITSEVA, K.I. [Izmitseva, K.I.], LYSENKO, I.M.
[Lysenko, I.M.]; FEDOROVSKAYA, Ye.A. [Fedorova'ka, G.G.]

Actinomycetes-antagonists from the soils of the Kiev region.
Mikrobiol. zhur. 27 no.5:7-10 '65. (MIRA 18:10)

1. Institut mikrobiologii i virusologii AN UkrSSR.

FEDOROVSKAYA, Ye.A. [Fedorovs'ka, U.O.]; LEONT'YEVA, K.I. [Leont'ieva, K.P.]

Antagonistic properties of some soil bacteria. Mikrobiol. zhur.
27 no.2:42-45 '65. (MIRA 18:5)

1. Institut mikrobiologii i virusologii AN UkrSSR.

LEONT'YEVA, L A

AUTHOR: Selitskaya S.F., Engineer and Leont'eva, I.A., Engineer.
 TITLE: Concerning the volt-ampere characteristics and charging
 conditions of lead, and nickel-iron accumulators. (O
 vol'tampemnykh kharakteristikakh i zaryadnykh rezhimakh
 svintsovo-i zhelezonikelevykh akkumulyatornykh.batarey.
 PERIODICAL: "Vestnik Elektromyshlennosti"(Journal of the Electr-
 ical Industry) 1957, Vol.28, No.6, pp.70-72 (U.S.S.R.)

ABSTRACT: In 1957, some motor trucks will be equipped with
 nickel-iron accumulators type 3 x 3 C XH-70 in place of
 lead accumulators 2 x 3 CT-70. It is therefore of
 interest to compare the volt-ampere characteristic of
 lead and nickel-iron batteries and also to ascertain the
 best way of charging them on an automobile. An invest-
 igation was made into motor starting conditions, partic-
 ularly at low temperatures. In making the tests allow-
 ance was made for the fact that in automobile service
 accumulators are charged discontinuously. The batter-
 ies were first partially discharged and then somewhat
 recharged after which starter tests were carried out.
 The results of the tests are given in Figs. 1 and 2.
 Fig. 1 shows that at low temperatures (-18 °C) if the

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Concerning the volt-ampere characteristics and charging conditions of lead, and nickel-iron accumulators. (Cont.)

110-6-20/24

accumulator is charged and discharged successively the power given out by a lead accumulator is practically independent of the state of discharge whilst that of a nickel-iron accumulator diminishes appreciably if the accumulator is partially discharged. At a temperature of 25 °C (Fig. 3) the power delivered by a lead accumulator that is discharged and partially charged in turn also depends less on the degree of discharge than in the case of nickel-iron accumulators. (Fig.4). The experimental data that was obtained may be used to state desirable charging conditions for lead and nickel-iron accumulators on automobiles. Recent investigations have shown that in modern lead accumulators with improved types of case, separators, and expanders for the negative electrodes undercharging of the battery does not lead to sulphating and other harmful consequences. However, lead accumulators can readily be damaged by overcharging. Therefore, the charging conditions for lead accumulators on automobiles should primarily be designed to protect them from gross overcharging.

Card 2/3

Concerning the volt-ampere characteristics and charging conditions of lead, and nickel-iron accumulators.
(Cont.)

110-6-20/24

Nickel-iron accumulators on the other hand are subject to damage by undercharging but overcharging does them hardly any harm. Automobile charging rates should be arranged accordingly.

There are 4 figures.

ASSOCIATION: Branch of NIAN (Filial NIAN).

SUBMITTED: September 21, 1956.

AVAILABLE:

Card 3/3

LEONT'YEVA, L. A.

05(4) PHASE I BOOK EXPLOITATION SOV/2216

- Sveshchaniye po elektrokhemii. 4th, Moscow, 1956.

Trudy... [abornik] (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 800 p. Kirta slip inserted. 2,500 copies printed. Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A. M. Pruskin (Resp. Ed.) Academician, O. A. Yasin, Professor, S. I. Zhdanov (Resp. Secretary), B. M. Kanbanov, Professor, Ya. M. Kolotyrkin, Doctor of Chemical Sciences, V. V. Jasev, P. D. Lukovtsev, Professor, Z. A. Solov'yeva, V. V. Stender, Professor, and O. M. Florianovich; Ed. of Publishing House: M. G. Yegorov; Tech. Ed.: T. A. Prusakov.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry, which was held by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemistry: chemical kinetics, double layer theories and electrode processes in metal electroposition and industrial electrowinning. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of each of the articles.

Kaprin, A. G., and V. V. Slonovskiy (Chernopostovskiy Institute of Chemical Technology, Moscow). Diffusivity, Polarization of Graphite Electrodes During the Anodic Separation of Chlorine 823

Buravova, W. Ye., and O. A. Teyzhanov (Institute of Chemistry, Academy of Sciences, USSR). Hydrogen Overvoltage at Electrodes With Homogeneous Surface 827

Bakov, A. A., L. I. Kuznetsov, and E. V. Kasatkina (Physicochemical Institute, Lenin L. Ya. Karpov). Mechanism of the Simultaneous Electrochemical Formation of Peroxy Sulfuric Acid, Sulfuric Acid, and Hydrogen Peroxide in Aqueous Sulfuric Acid Solutions 834

Volkov, G. I., Z. L. Klitsa, Ye. K. Susorova and M. V. Chernyagina. Influence of Surface-Active Substances on the Rate of Decomposition of Sodium Amalgam 841

Il'in, O. G., and V. I. Surichenko (Novosibirsk Polytechnic Card 31/41

Transactions of the Fourth Conference (Cont.) SOV/2216
Institute Iseini S. Ordzhonikidze). Influence of the Nature of the Electrolyte on the Anodic Process During the Electrolysis of Aqueous Ammonia and Aqueous Chlorine 845

Voronin, M. M. (Deceased), B. G. Prishchepchenko, A. A. Yedigeryan, O. V. Izraelova, Z. A. Solov'yeva, Ye. Kh. Isatando, and S. V. Trichter (Kiyev Polytechnical Institute). Electrolytic Reduction of Oxygen at Porous Cathodes 849

Discussion [M. A. Fedotov, N. I. Kaganovich, Ye. M. Kuchinsky, O. M. Komarov, and contributing authors]

AVAILABLE: Library of Congress

Card 34/34 TM/ec 9-30-59

TOKMALAYEV, S.P., dotsent [deceased]; KUZHELEV, N.S., dotsent; OSTROVI-
TYANOV, K.V., akademik; ALEKSEYEV, A.M., dotsent; KUDROV, V.M.;
LEONT'YEV, L.A. Prinsipalnyi uchastnye: BELIAYEVA, Z.N., kand.ekon.
nauk; MRACHKOVSKAYA, I.M., kand.ekonom.nauk; RYNDINA, M.N.,
kand.ekonom.nauk; SHIRINSKIY, I.D., kand.ekonom.nauk, red.;
YUMASHEV, A.I., kand.ekonom.nauk; PROKOP'YEV, S.P., red.; NAUMOV,
K.M., tekhn.red.

[Capitalist production method] Kapitalisticheskiy sposob pro-
izvodstva. Moskva. Pt.2. 1960. 357 p. (MIRA 13:10)

1. Kommunisticheskaya partiya Sovetskogo Soyuz. Vysshaya
partiynaya shkola. 2. Chlen-korrespondent Akademii nauk SSSR (for
Leont'yev).

(Economics)

S/079/6C/030/011/002/026
B001/B066

AUTHORS:

Kostsova, A. G. and Leont'yeva, L. B.

TITLE:

Investigation of Alkane Sulfonic Acids. XXIII. Synthesis and Properties of Some Esters of Methane Sulfonic Acid

PERIODICAL:

Zhurnal obshchey khimii, 1960, Vol. 30, No. 11, pp. 3541-3542

TEXT: The purpose of the present paper was the synthesis of some methane sulfonic acid esters which are described, but not sufficiently characterized, in publications, as well as some new esters of this acid. The authors obtained: bis (methane sulfonate) of ethylene glycol (I), bis (methane sulfonate) of α,γ -butylene glycol (II), tri-(methane sulfonate) of glycerol (III), methane sulfonate of ethylene chlorohydrin (IV), bis (methane sulfonate) of α -chlorohydrin of glycerol (V), of which (II) and (V) have so far not been described. The reaction took place by mixing methane sulfochloride with the corresponding alcohol in pyridine medium under cooling with subsequent precipitation of the ester by means of acid. The esters (II) - (V) resulted in good yields, (I), however, in

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Investigation of Alkane Sulfonic Acids.
XXIII. Synthesis and Properties of Some
Esters of Methane Sulfonic Acid

S/079/60/030/011/002/026
B001/B066

poor yield. There are 1 table and 4 references: 3 Soviet, 1 Belgian,
1 German, 1 British, and 1 Canadian.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State
University)

SUBMITTED: July 3, 1959



Card 2/2

KOSTSOVA, A.G.; LEONT'YEVA, L.B.

Alkanesulfonic acids. Part 23: Synthesis and properties of some
esters of methanesulfonic acid. Zhur. ob. khim. 30 no.11:3541-
3542 N'60. (MIRA 13:11)

1. Voronezhskiy gosudarstvennyy universitet.
(Methanesulfonic acid)

LEONT'YEVA, L.D.; OZERETSKOVSKIY, N.A.; KOKORIN, I.N.

Adaptational-protective reaction of the organism in diphtheria intoxication. Vest. AMN SSSR 19 no.3:37-42 '64.

(MIRA 17:10)

1. Moskovskiy institut vaktsin i syvorotok imeni Mechnikova i Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR, Moskva.

LEONT'YEVA, L.O.

Dysentery control in Klin District, Moscow Province. Zdrav.Ros.Feder.
2 no.5:25-30 My '58. (MIRA 11:5)

1. Iz Instituta organizatsii zdavookhraneniya i istorii meditsiny
imeni N.A. Semashko Ministerstva zdavookhraneniya SSSR. Direktor
Ye.D. Ashurkov.

(KLIN DISTRICT--DYSENTERY)

LEONT'YEVA, L.O., nauchnyy sotrudnik.

Work of sanitary and epidemiological stations under the new industrial
administration system. Gig. i san. 23 no.12:36-39 D '58. (MIRA 12:1)

1. Iz Instituta organizatsii zdavookhraneniya i istorii meditsiny imeni
N. A. Semashko AMN SSSR.
(INDUSTRIAL HYGIENE
in Russia (Rus))

ZHUKOV, A.Ye.; LEONT'YEVA, L.G.

Activities of a polyclinic at the Stalinogorsk Chemical Plant in
Tula Province in lowering morbidity among workers. Sov.zdrav. 18
no.10:8-13 '59. (MIRA 13:2)

1. Iz mediko-sanitarnoy chasti Stalinogorskogo khimkombinata (Tul'-
skaya oblast').

(INDUSTRIAL MEDICINE)

(CHEMICAL INDUSTRY)

LEONT'YEVA, L.G.

Diphtheria and some of its epidemiological characteristics in
foreign countries. Zdrav. Ros. Feder. 8 no.2:21-24 F'63
(MIRA 17:3)

1. Institut organizatsii zdavookhraneniya i istorii meditsi-
ny imeni N.A. Semashko.

L 26555-66 EWP(j)/EWT(m)/T IJP(c) RM

ACC NR: AP6017362

SOURCE CODE: UR/0062/66/000/003/0556/0558

AUTHOR: Nesmeyancy, A. N.; Perevalova, E. G.; Leont'yeva, L. I.; Ustynyuk, Yu. A.

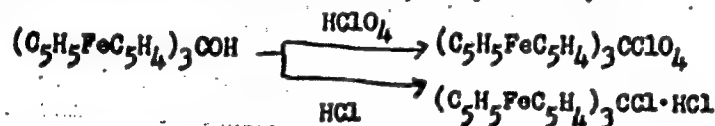
ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Triferrocenylchloromethane hydrochloride 1

SOURCE: AN SSSR. Izvestiya. Soriya khimicheskaya, no. 3, 1966, 556-558

TOPIC TAGS: organic synthetic process, perchloric acid, perchlorate, hydrogen chloride, organoiron compound

ABSTRACT: The ionic triferrocenylmethylperchlorate and triferrocenylchloromethane hydrochloride were synthesized by reaction of triferrocenylcarbinol with perchloric acid in benzene and anhydrous HCl in ether, respectively.



In polar solutions triferrocenylchloromethane hydrochloride decomposes to form ferrocenylfulvene. [JPRS]

SUB CODE: 07 / SUBM DATE: 22Jul65 / ORIG REF: 003 / OTH REF: 002

Card 1/1

UDC: 542.91+541.49+546.72

L 26554-66 EWP(j)/EWT(m)/I IJP(c) RM
ACC NR: AP6017364

SOURCE CODE: UR/0062/66/000/003/0558/0559

AUTHOR: Nesmeyanov, A. N.; Perevalova, E. G.; Leont'yeva, L. I.; Ustynyuk, Yu. A.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

24
B

TITLE: Reactions of triferrocenylchloromethane hydrochloride 1

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 3, 1966, 558-559

TOPIC TAGS: organoiron compound, chlorinated organic compound, organomagnesium compound, organosodium compound, organolithium compound, chemical reaction

ABSTRACT: Triferrocenylchloromethane hydrochloride reacts with nucleophilic reagents (organomagnesium and organosodium compounds, lithium aluminohydride, sodium methylate and sodium cyanide) to form the corresponding derivatives of triferrocenylmethane. [JPRS]

SUB CODE: 07 / SUBM DATE: 22Jul65 / ORIG REF: 002 / OTH REF: 001

Card 1/1

UDC: 542.91+541.49+546.72

NESMEYANOV, A.N.; PFREVALOVA, E.G.; LEONT'YEVA, L.I.; USTYNYUK, Yu.A.

Ferrocenylmethylthiol and methyl(ferrocenylmethyl) sulfide.
Izv. AN SSSR. Ser. khim. no.9:1696-1697 '65. (MIRA 18:9)

1. Moskovskiy gosudarstvennyy universitet.

L 27456-66 EWT(m)/EWP(j) RM

ACC NR: AP5027691

SOURCE CODE: UR/0062/65/000/010/1882/1884

AUTHOR: Nesmeyanov, A. N.; Perevalova, E. G.; Leont'yeva, L. I.;
Ustynyuk, Yu. A.

ORG: Moscow State University im. M. V. Lomonosova (Moskovskiy
gosudarstvennyy universitet)

TITLE: Synthesis of 1,2-disubstituted ferrocenes

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1965,
1882-1884

TOPIC TAGS: ferrocene, chemical reaction, desulfurization, chemical
reduction

ABSTRACT: The reduction of 1,2-(2'-thia-4'-ketotetramethylene)ferrocene (I) was investigated in order to find suitable methods for the synthesis of homoannular disubstituted ferrocenes. I was desulfurized with Raney nickel to form 1,2-methylethyl- and 1,2-methylacetylferrocene. Reduction of I with lithium aluminum hydride gave 1,2-(2'-thia-4'-hydroxytetramethylene)ferrocene (II). Reduction of I in the presence of aluminum chloride gave 1,2-(2'-thiatetramethylene)-ferrocene, a small amount of II, and methylferrocene, and in one instance, 1,2-(2'-thia-3',4'-dehydrotetramethylene)ferrocene. Orig. art. has: 2 equations.

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